

The Olympia Rose Society

Fertilizing Roses

No fertilizer can ever replace inadequate sunlight. Each species of plant has an inborn requirement for a certain amount of direct sunlight (sunlight falling directly on the leaves, not just an absence of night). Planting a plant in too much shade will starve it, and adding extra fertilizer will never make up for that, since fertilizer is not food. Roses require full-day sun, especially in our cloudy climate.

Plants absorb nutrients by the roots, from the soil water. Nutrients must be dissolved in water, and in the correct chemical form, to be absorbed by plant roots. Soil pH, water content, mineral content, and the proportions of clay and organic matter compared to sand and gravel will determine what chemical form nutrients will be in, and whether or not they will be in solution and available to plant roots. Most nutrients are most available at pHs ranging from 5.5 to 7.5. Magnesium and molybdenum require the higher pHs, and iron, copper, zinc, manganese and cobalt require the lower pHs. A soil pH of between 6 and 7 is best for roses.

Nitrogen is, by far, the most important nutrient to give plants. It is used in the largest amounts and is held in the soil for only a short time. Nitrogen can be stored in the soil in the form of organic matter, but that has to be replaced at least every year through mulching. Olympia soils are naturally very low in organic matter, so annual mulching with compost or manure is important. High levels of other nutrients are not necessary, and annual applications of compost or manure can supply all the trace elements necessary.

Non-organic fertilizers may be called chemical, or synthetic, or conventional. Organic fertilizers come from once-living tissues, either plant or animal, or from other naturally-occurring sources such as greensand or rock phosphate or manure. Organic fertilizers must be broken down by soil microbes and are therefore slow-release. Synthetic fertilizers are manufactured in chemical plants, although they may use natural sources for feedstock. Usually they are already in water-soluble form and are therefore both fast-acting and fast-disappearing. You can (and should) use both organics and synthetics. All fertilizers, both organic and systemic, must list percentages of nitrogen, phosphorus and potassium on the label, as well as where to find information on contents of specified heavy metals in the fertilizer.

Synthetic slow-release fertilizers such as Osmocote rely on warmer soil temperatures than we get here. They can work well in pots, but don't rely on them for plants in the ground.

Organic fertilizers can be applied as a light mulch of manure or compost in fall, and then a higher-nitrogen form in spring. Rabbit manure can be used fresh, all others must be composted before use. Chicken manure is higher nitrogen than other manures. There are many brands of organic rose fertilizers. Synthetic fertilizers should not be applied until roses have about 4" of new growth in spring, usually in late April or May. Apply more in June, July and August. Always follow label directions for all fertilizers.

Alfalfa pellets or meal, and alfalfa tea, provide nitrogen and a growth hormone. Apply in May. Epsom salts provides sulfur and magnesium. Test your soil first. A very little goes a very long way. Apply no more than once a year, in May. Dolomitic lime will also provide magnesium while adjusting soil pH so don't use both.

Products that combine a fertilizer with a systemic insecticide don't work well here. The fertilizer (and the insecticide) wash out of the soil too fast.

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Watering Roses

The most important summer 'fertilizer' to give your roses is water. When roses get stressed from not enough water, they stop growing and it can take all summer for them to recover from one dry period. Drought stress sets off a chain reaction of growth-stopping hormones in the plant, which can take months to wear off.

Roses need 1" of rain a week during the growing season, or about 5 gallons per plant per week. Roses in pots may require daily watering during hot weather, but roses in the ground should not.

Always make sure roses have water before spraying or fertilizing, and water in fertilizer afterwards. Fertilizers have to dissolve in water to work.

Drip irrigation works very well with roses as it keeps the foliage dry to discourage blackspot. Overhead watering works well too so long as it's done early enough in the day, when the foliage can dry off quickly. Apply enough water to soak the top 12" of soil, and then wait for the top 3-4" to dry out before watering again.

Roses can't take wet feet. Make sure water drains away from roses, and wait for the soil to start to dry out in the top few inches before watering again. Wet soil encourages root rotting fungi. Roses with root rot will wilt as if they were too dry – they can't pick up water from the soil anymore because their roots are dead.

Make sure potted roses can drain. If the drain hole is sitting directly on the ground, or does not have a piece of mesh over it, the drain hole can get blocked and not allow water to drain out. You can buy 'pot feet' to sit pots on to improve drainage. Or make your own from rocks or pieces of brick. Use a piece of window screen material to cover drain holes before filling pots with potting soil. Bonsai suppliers sell a heavy-duty bonsai mesh for covering drain holes too. These work way better than using pieces of clay pot, or rocks, or Styrofoam pieces.

Once-blooming roses like the older Albas and Gallicas can be treated like any other spring-blooming landscape shrub as far as watering and fertilizing go – they don't need as much water or fertilizer as repeat-blooming roses do.